Cambridge International AS & A Level

Cambridge International Examinations
Cambridge International Advanced Subsidiary and Advanced Level

INFORMATION TECHNOLOGY **9626/04**

Paper 4 Advanced Practical **For Examination from 2017**

SPECIMEN MARK SCHEME

2 hours 30 minutes

MAXIMUM MARK: 110

This document consists of **12** printed pages.

© UCLES 2015

CAMBRIDGE International Examinations

[Turn over

Task	Answer	Marks
1	Light blue larger circle with dark blue smaller circle inside with a suitable space left for company name	**1**
	Circles are concentric	**1**
	White outline of 3 mountains inside smaller inner circle	**1**
	International Ski Tours fit to the path between circles	**1**
	Wraps approximately half of circles	**1**
	Text is clearly visible (1) and has an outline and a shadow (1)	**2**
	Two skis are present, crossed and do not overlap the larger circle	**1**
	Skis are layered over inner circle	**1**
	Skis are layered under mountains and text	**1**
	Resize the image to 150 pixel × 150 pixel	**1**
	Save the logo as a .jpg file with the file name IST_logo_ followed by Centre number_candidate number	**1**

Task	Answer		Marks
2	Pixels (of different colours)	Objects (with properties)	**2**
	Larger – or Vector smaller (colour and position of each pixel stored)	Only properties of objects stored	**2**
	Lose quality/definition (blocky/ pixelated)	No loss of quality/definition	**2**
	.bmp (only)	.svg (only)	**2**
	.dib, .jpeg, .gif, .tiff, .png	.cgm, .odg, .eps, .xml (not program files .psd, .cdr, .ai etc.)	**2**

© UCLES 2015

Task	Answer	Marks
3	Logo used created above and correct frame size set	**1**
	Animation of logo – small to large	**1**
	Smooth gradual growth of logo size	**1**
	All three images have been used	**1**
	Correct text on each image in bottom right-hand corner	**1**
	Text on each image is clearly visible	**1**
	Each image is displayed for a suitable length of time	**1**
	Opacity of each image has been changed to create fading effects	**1**
	Fading of each image is suitably timed	**1**
	Opacity of text on each image has been changed to create fading effect	**1**
	Text on each image fades in time with image	**1**
	Animation is smooth	**1**
	Animation is set to play continuously (loops)	**1**
	File exported	**1**
	Suitable file format for website used with correct file name, e.g. .mp4, .flv, .fla, .mov	**1**

Task	Answer	Marks
4	Creates the motion between two objects or images	**1**
	Gives the animation a smooth appearance	**1**

© UCLES 2015

[Turn over

Task	Answer	Marks
5	Customer_details.csv has been imported	**1**
	Customer_id set as Primary key	**1**
	Customer age field set as number data type	**1**
	Instructor_details.csv has been imported	**1**
	Instructor_id set as Primary key	**1**
	Adult and Child prices set as currency data type	**1**
	Adult and Child prices formatted as Euro	**1**
	A bookings table has been created	**1**
	Booking_id set as Primary key	**1**
	[Bookings]![Customer_id] set as lookup – Customer details appear for selection	**1**
	[Bookings]![Instructor_id] set as lookup – Instructor details appear for selection	**1**
	[Bookings]!Lesson_Time set as lookup or Booking_Times table created	**1**
	Customer, Instructor, Lesson_Times selection limited to list	**1**
	Correct times listed	**1**
	Lesson_Date set as Date/Time data type	**1**
	Lesson_Date Date/Time data type in short date format	**1**
	[Customer_Details]![Customer_id] to [Bookings]![Customer_id]relationship	**1**
	[Instructor_Details]![Instructor_id] to [Bookings]![Instructor_id]relationship	**1**
	A form has been created to make bookings	**1**
	The form has a place to select a customer	**1**
	Customer details appear for selection	**1**
	The form has a place to select an instructor	**1**
	Instructor details appear for selection	**1**
	The instructor choice is limited to the same ability as that of the customer	**1**
	A query for the record source has been used	**1**
	Query fields limited to required fields	**1**
	The customer names automatically display when selected	**1**
	The customer age automatically displays when selected	**1**
	The customer level automatically displays when selected	**1**
	The instructor name automatically displays when selected	**1**
	The instructor level automatically displays when selected	**1**
	The form has a place to enter a date	**1**
	The form has a list to select a booking time	**1**
	The booking times are limited to the times available	**1**
	The lesson price matching the customer age is displayed automatically	**2**
	The company logo is displayed on the form	**1**

© UCLES 2015

Task	Answer	Marks
5	Navigation buttons are displayed on the form	**1**
	Next/Previous and First/Last record buttons are displayed	**1**
	New and delete record buttons are displayed	**1**

Task	Answer	Marks
6	Logo and candidate details inserted	**1**
	Alert shows	**1**
	Alert displays count	**1**
	Alert displays the correct count	**1**
	Alert has a suitable message and spacing	**1**
	Count box displays results	**1**
	Count matches Alert display	**1**
	Correct count displayed	**1**
	A “Well done…..” message is displayed when 3 correct answers	**1**
	The correct message is displayed	**1**
	The message is at the response placeholder	**1**
	The text Enter Draw is displayed	**1**
	The text Enter Draw appears at the Enter placeholder	**1**
	The text Enter Draw only appears if 3 correct answers	**1**
	“Click here….” message is displayed when <3 correct answers	**1**
	The correct message is displayed	**1**
	A hyperlink is visible	**1**
	The text “here” is used as the hyperlink	**1**
	The hyperlink reloads the page	**1**
	Repeated submissions do not increment the count	**1**
	Comment – setting count to 0	**1**
	Comment – declaring variables	**1**
	Comment – checking answers – incrementing count – blanking wrong answers	**1**
	Comment – Alert to display results – count entered on page	**1**
	Comment – Test count – display response	**1**

© UCLES 2015

<table>
<tr><th>Task</th><th>Answer</th><th>Marks</th></tr>
<tr><td>7</td><td>3 valid data types listed with valid example of each

<table><tr><th>Data type</th><th>Example</th></tr><tr><td>Number – Integer or Floating point</td><td>4, 27, 655354.2, 27.4, 5.63</td></tr><tr><td>String – Character</td><td>abc, hello world a, F, 3, $</td></tr><tr><td>Boolean</td><td>True/false Y/N 1/0 –1/0</td></tr><tr><td>Also Allow</td><td></td></tr><tr><td>Array</td><td>GameScores = (124, 99, 121, 105, 132)</td></tr></table></td><td>6</td></tr>
</table>

© UCLES 2015

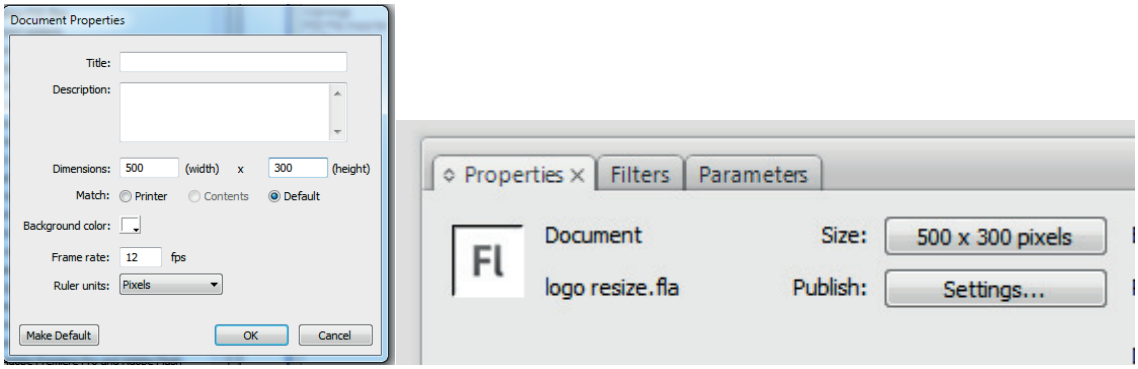
Here are some examples of the tasks being worked.

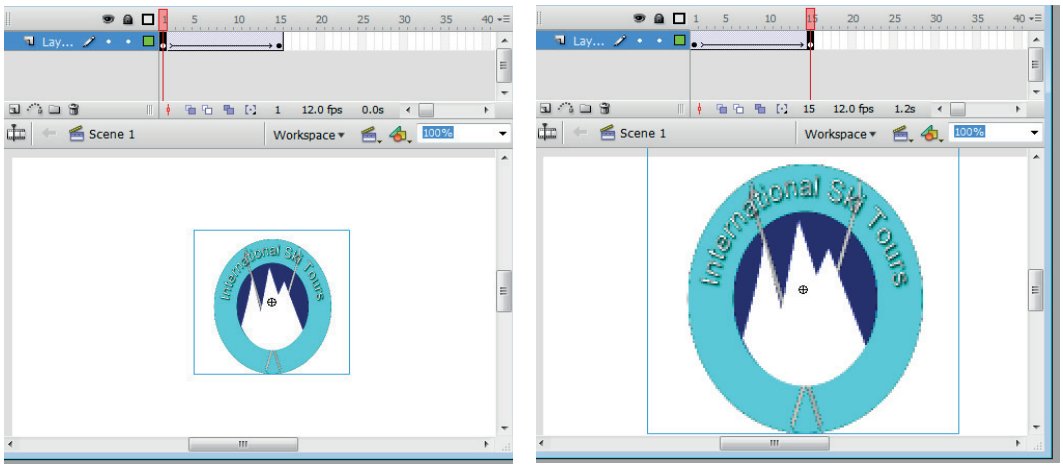
Task 1

Task 3

Task 3 is marked from the playback of the animation.

EXAMPLES (WHEN USING Adobe Flash)





Task 5

Customer_details

Field Name	Data Type
Customer_id	AutoNumber
Forename	Text
Surname	Text
Age	Number
Level	Text

Instructor_details

Field Name	Data Type
Instructor_id	AutoNumber
Instructor name	Text
Instructor level	Text
Lesson price adult	Currency
Lesson price child	Currency

General | Lookup

Format	Euro

Bookings

Field Name	Data Type
Booking_id	AutoNumber
Custormer id	Number
Instructor id	Number
Lesson date	Date/Time
lesson Time	Text

General | Lookup

Display Control	Combo Box
Row Source Type	Table/Query
Row Source	Customer_details
Bound Column	1
Column Count	5
Column Heads	No
Column Widths	2.54cm;2.54cm;2.54cm;2.54cm;2.54cm
List Rows	16
List Width	12.698cm
Limit To List	Yes

Bookings

Booking_id	Custormer i	Instructor ic	Lesson date	lesson Time	Click to Add
(New)					
1	Johann	Schmidt	15	Beginner	
2	Steffi	Beckenbauer	24	Intermediate	
3	Maurice	LaPorte	12	Beginner	
4	Venkhat	Dasgupta	38	Advanced	
5	Gurdeep	Dasgupta	41	Intermediate	
6	John	Smith	33	Beginner	
7	Malcom	Jones	27	Intermediate	
8	Fatima	Hedge	45	Advanced	
9	Jorge	Lopez	31	Intermediate	
10	Tanjung	Lu	50	Advanced	

Bookings

Field Name	Data Type
Booking_id	AutoNumber
Custormer id	Number
Instructor id	Number
Lesson date	Date/Time
lesson Time	Text

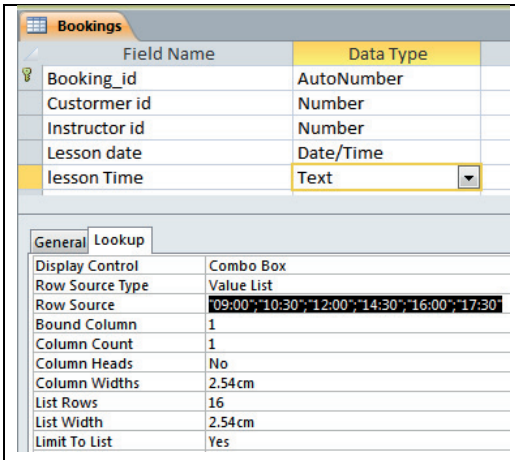
General | Lookup

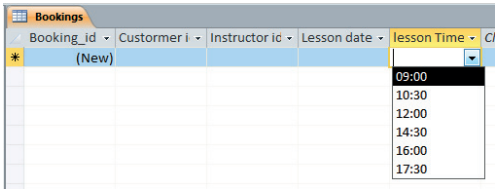
Display Control	Combo Box
Row Source Type	Table/Query
Row Source	Instructor_details
Bound Column	1
Column Count	5
Column Heads	No
Column Widths	2.54cm;2.54cm;2.54cm;2.54cm;2.54cm
List Rows	16
List Width	12.698cm
Limit To List	Yes

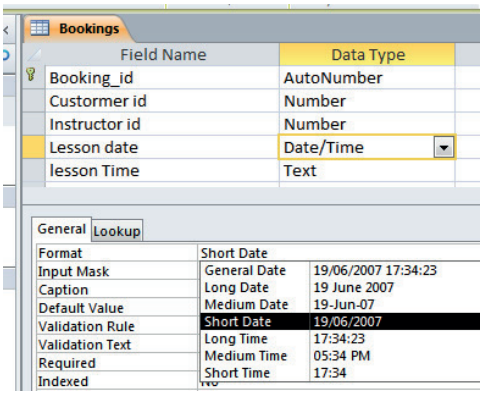
Bookings

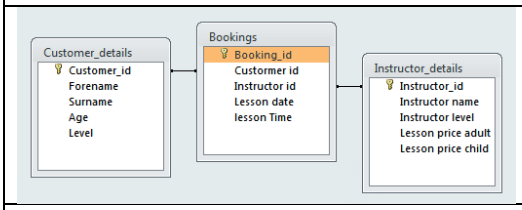
Booking_id	Custormer i	Instructor ic	Lesson date	lesson Time	Click to Add	
(New)						
1	Toni	Advanced	€75.00	£45.00		
2	Pablo	Intermediate	€65.00	£35.00		
3	Jenny	Intermedate	€65.00	£35.00		
4	Yuliana	Advanced	€75.00	£45.00		
5	Nikos	Beginner	€45.00	£30.00		
6	Dhruv	Beginner	€45.00	£30.00		
7	Aditya	Intermediate	€65.00	£35.00		
8	Gertrud	Beginner	€45.00	£30.00		

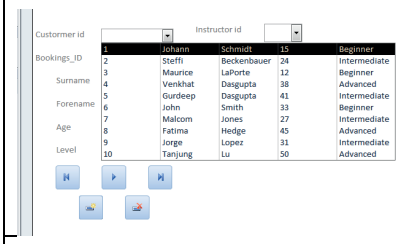
Task 5 continued

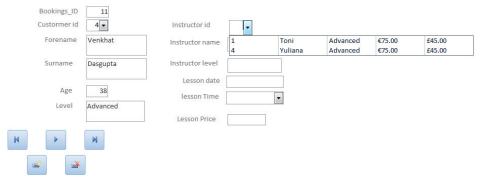


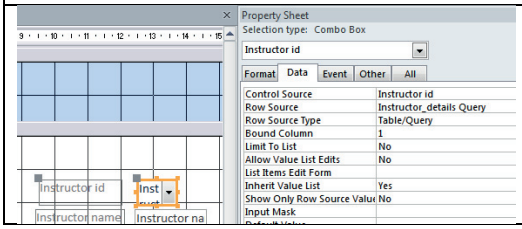




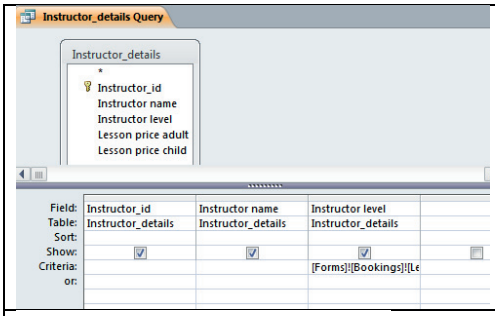


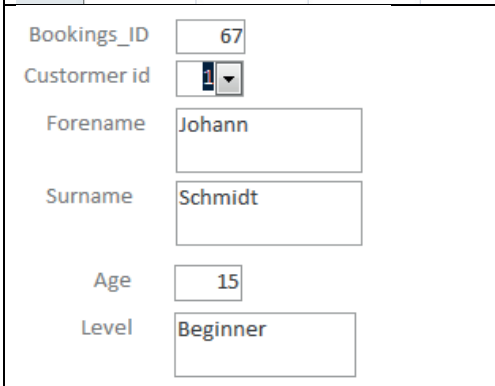


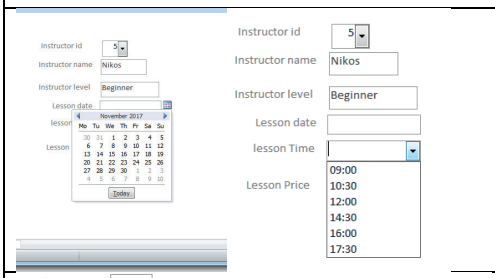


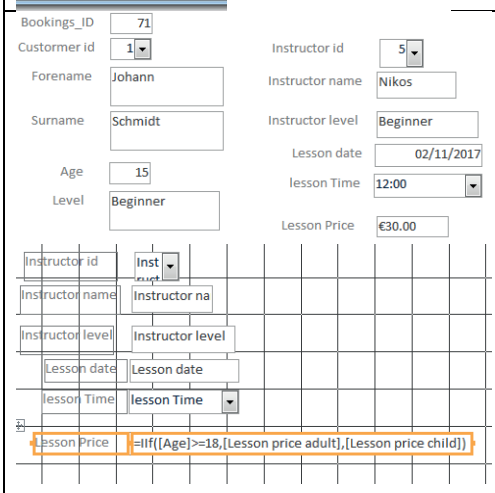


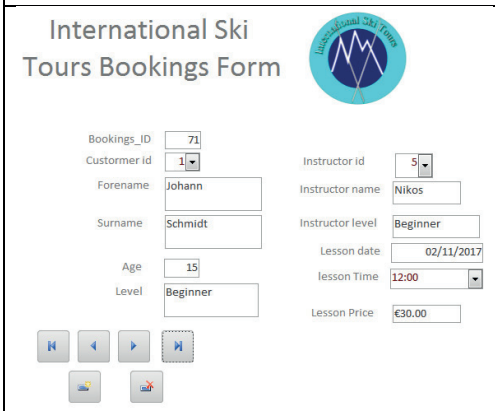
Task 5 continued



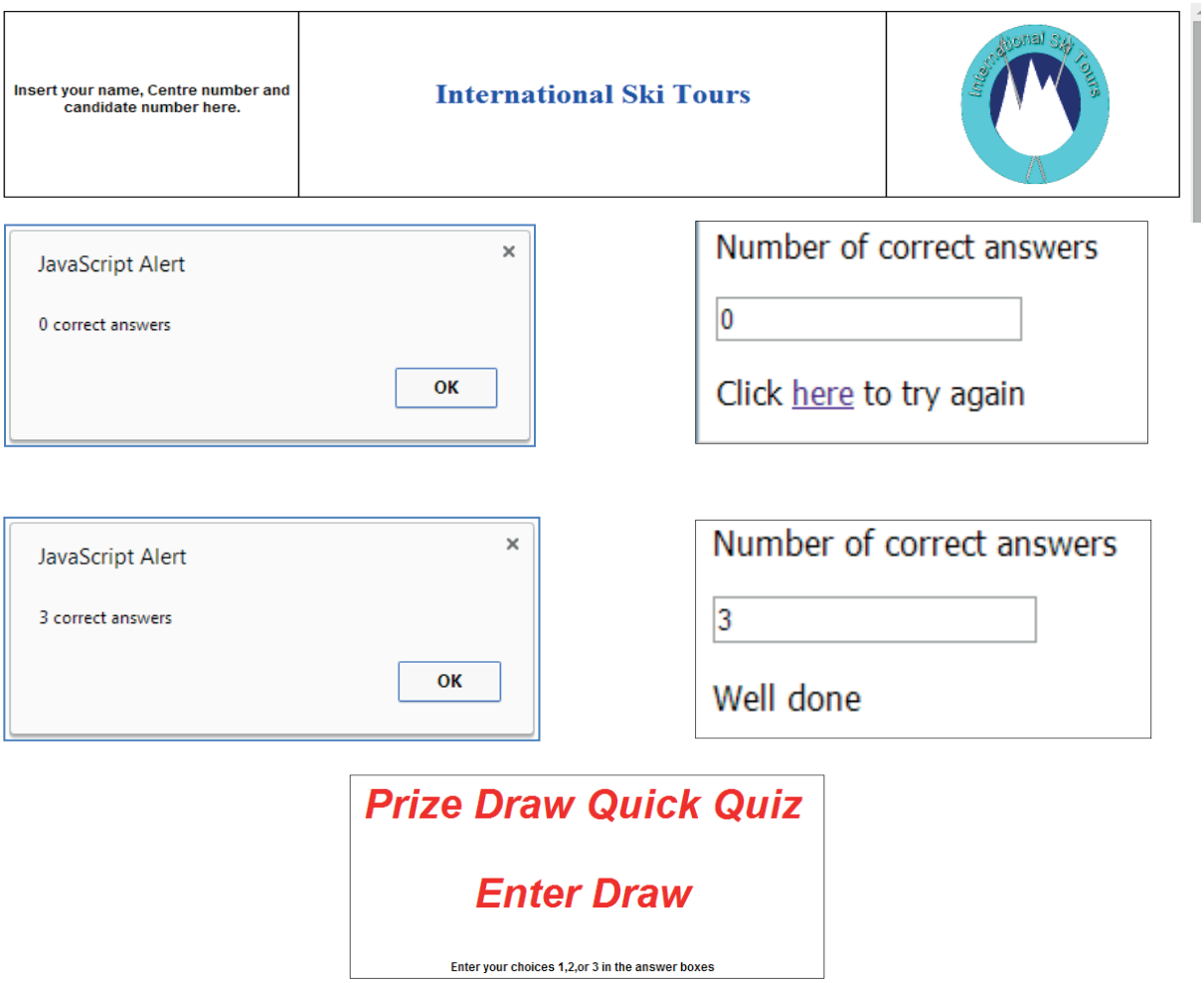








Task 6

```
Solution for information only – task is marked from outcomes on the webpage.

<SCRIPT LANGUAGE="JavaScript">
// set count to zero
var c=0;

//declare function
function myFunction() {

// declare and initialise answer variables

var first=Number(Answer1.value);
var second=Number(Answer2.value);
var third=Number(Answer3.value);

//declare and initialise hyperlink variable
var str = "here";
var result = str.link("IST.html");


//test answers
if(first=="2"){c++} else {Answer1.value=""}

if(second=="3") {c++} else {Answer2.value =""}

if (third=="2") {c++} else {Answer3.value=""}

//Display Alert with count of correct answers

window.alert (c + " "+"correct answers");

//Display number of correct answers on page
count.value=c;

//Test Results
if (c==3)

// Display Conditional message and hyperlink
    {
    document.getElementById("response").innerHTML = "Well done.";}
    else
    {document.getElementById("response").innerHTML = "Click "+ result + " to try
    again";
    }
if (c==3)
    {
    //Display Final text
    document.getElementById("Enter").innerHTML =
    "Enter Draw";
    }
c=0
}

</SCRIPT>
```

Task 6 continued